UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,545	04/22/2005	Claus Hoffjann	4796/PCT	9104
	7590 12/09/200 VT ATTORNEYS, P.A	EXAMINER		
P.O. BOX 726		MAPLES, JOHN S		
HAMPDEN, M	E 0 4444- 0720		ART UNIT	PAPER NUMBER
			1795	
			MAIL DATE	DELIVERY MODE
			12/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applicat	Application No.		Applicant(s)		
		10/532,5	545	HOFFJANN ET A	AL.		
		Examine	er	Art Unit			
		John S. I	√laples	1795			
Period fo	The MAILING DATE of this communic or Reply	cation appears on th	ne cover sheet wi	ith the correspondence a	ddress		
A SH WHIC - Exter after - If NC - Failu Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAN IS IN THE MA	AILING DATE OF T of 37 CFR 1.136(a). In no e unication. tutory period will apply and v vill, by statute, cause the ap	THIS COMMUNIO event, however, may a r will expire SIX (6) MON epilication to become AE	CATION. reply be timely filed ITHS from the mailing date of this BANDONED (35 U.S.C. § 133).	·		
Status							
2a)⊠	Responsive to communication(s) filed This action is FINAL . 2 Since this application is in condition for closed in accordance with the practice	b)⊡ This action is or allowance excep	non-final. ot for formal matt	·	ne merits is		
Dispositi	on of Claims						
5)□ 6)⊠ 7)⊠ 8)□ Applicati 9)□	Claim(s) 1,2 and 25-46 is/are pending 4a) Of the above claim(s) is/are Claim(s) is/are allowed. Claim(s) 1, 2, 25-29,34,37,44-46 is/are Claim(s) 30-33,35,36 and 38-43 is/are Claim(s) are subject to restrict on Papers The specification is objected to by the	e withdrawn from corre rejected. e objected to. ion and/or election Examiner.	onsideration. requirement.				
 10) ☐ The drawing(s) filed on 31 August 2009 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 							
Priority ເ	ınder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) Notic 3) Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PT nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>8/31/09;9/11/09</u> .	ГО-948)	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application 			

Application/Control Number: 10/532,545 Page 2

Art Unit: 1795

1. The amendment filed 31 August 2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the expression "or take-off" added in the paragraph beginning on page 3, line 13 and the expression "pre-compressed" added to the paragraph beginning on page 4, line 3.

Applicant is required to cancel the new matter in the reply to this Office Action.

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Application/Control Number: 10/532,545

Art Unit: 1795

4. Claims 1, 2, 25, 26, 28, 29, 34, 37 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over UK-2338750 ('750) in view of EP-964,466. ('466) (New Rejection)

Page 3

The '750 patent teaches an apparatus for producing water in an aircraft using conventional fuel cells 33/514 (see pages 2-6 in '750 and Figures 2-5) that are located within a combustion chamber in the aircraft; which fuel cells and chamber could be operated separately. The embodiment in Figures 3 and 4 include gaseous hydrogen and air being fed to the fuel cells and hence to the combustion chamber. The Figure 5 embodiment in '750 includes a turbine downstream of the anode side of the fuel cell. A compressor is used for the air but it would have been obvious to use a compressor for the hydrogen as well to keep a steady flow of fuel to the fuel cell; thus setting forth pressurizing both the anode and cathode sides of the fuel cell. The combustion chamber would inherently collect used water from the fuel cells. The only claimed feature not taught by '750 is the fuel cell therein being a high temperature fuel cell. The '466 patent teaches a high temperature solid oxide fuel cell for use with a turbine in producing power. To have included the solid oxide fuel cell of '466 in the teachings of '750 would have been obvious to one of ordinary skill in this art because the same are well known high producing high temperature fuel cells.

Page 4

Art Unit: 1795

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over '750 in view of both '466 and WO99/35702. ('702) (New Rejection)

The only claimed feature not shown by the combination of '750 and '466 is the condensation of the water vapor from the fuel cell. The '702 reference teaches in line 32 on page 5 through page 6, line 4, the condensation of water vapor from the fuel cell. to have utilized the condensation of water vapor of '702 in the apparatus of '750/'466 would have been obvious so that the water could be utilized for additional purposes such as a heating source.

- 6. Claims 30-33, 35, 36, 38-43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Application/Control Number: 10/532,545 Page 5

Art Unit: 1795

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/532,545 Page 6

Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John S. Maples/

John S. Maples Primary Examiner Art Unit 1795

JSM/12-7-2009